

With this response, no claims are changed.

Listing of Claims:

1. (Original) A node-and-strut structure comprising:

a set of at least six vertebrae each including one left-hand strut having a proximal portion and a distal portion, one right-hand strut having a proximal portion and a distal portion, and one primary node rigidly engaging the left-hand strut's proximal portion and the right-hand strut's proximal portion, a primary axis passing through each of the primary nodes, the primary nodes each including at least 1% metal by weight, the left-hand struts all being nominally mutually parallel, the right-hand struts all being nominally mutually parallel also;

several left-hand nodes each bearing against a respective one of said left-hand struts' distal portions such that a left-hand axis lying in a baseplane with the primary axis passes through each of the left-hand nodes, the left-hand axis forming with each of the left-hand struts an acute angle about equal to $j \times 20.9^\circ + k \times 31.7^\circ + m \times 36^\circ + n \times 37.4^\circ$, where j, k, m, and n are each an integer ≥ 0 ; and

several right-hand nodes each bearing against a respective one of said right-hand struts' distal portions such that a right-hand axis parallel to the baseplane passes through each of the right-hand nodes, the right-hand axis forming with each of the right-hand struts an acute angle about equal to $p \times 20.9^\circ + q \times 31.7^\circ + r \times 36^\circ + s \times 37.4^\circ$, where p, q, r, and s are each an integer ≥ 0 .

2. (Original) The node-and-strut structure of claim 1 in which said nodes each primarily comprise an iron-containing alloy.

3. (Original) The node-and-strut structure of claim 1 in which said nodes each include at least 1% metal by weight.

4. (Original) The node-and-strut structure of claim 1 in which said struts each include at least 1% carbon fiber by weight.

5. (Original) The node-and-strut structure of claim 1 in which all of said acute angles that are formed with the left-hand axis are within 0.4° of $j \times 20.9^\circ + k \times 31.7^\circ + m \times 36^\circ + n \times 37.4^\circ$.

6. (Original) The node-and-strut structure of claim 1 in which said left-hand and right-hand nodes each have a metallic surface bearing against a respective one of said distal portions.

7. (Original) The node-and-strut structure of claim 1 in which the left-hand and right-hand struts of each of the vertebrae form a primary angle therebetween that is nominally equal to an acute angle of $b \times 20.9^\circ + d \times 31.7^\circ + e \times 35.3^\circ + f \times 36^\circ$, where b, d, e, and f are each an integer ≥ 0 .

8. (Original) The node-and-strut structure of claim 1 in which the left-hand and right-hand struts of each of the vertebrae form a primary angle therebetween that is nominally complementary to an acute angle of $b \times 20.9^\circ + d \times 31.7^\circ + e \times 35.3^\circ + f \times 36^\circ$, where b, d, e, and f are each an integer ≥ 0 .

9. (Original) The node-and-strut structure of claim 1 in which the left-hand and right-hand struts of each of the vertebrae form a primary angle therebetween that is nominally complementary to an acute angle of $b \times 20.9^\circ + d \times 31.7^\circ + e \times 35.3^\circ + f \times 36^\circ$, where b is a positive integer and d, e, and f are each an integer ≥ 0 .

10. (Original) The node-and-strut structure of claim 1 in which the left-hand and right-hand struts of each of the vertebrae form a primary angle therebetween that is nominally complementary to an acute angle of $b \times 20.9^\circ + d \times 31.7^\circ + e \times 35.3^\circ + f \times 36^\circ$, where d is a positive integer and b, e, and f are each an integer ≥ 0 .

11. (Original) The node-and-strut structure of claim 1 in which the left-hand and right-hand struts of each of the vertebrae form a primary angle therebetween that is nominally complementary to an acute angle of $b \times 20.9^\circ + c \times 30^\circ + d \times 31.7^\circ + e \times 35.3^\circ + f \times 36^\circ + g \times 37.4^\circ$, where b, c, d, e, f, and g are each an integer ≥ 0 .

12. (Original) The node-and-strut structure of claim 1 in which the set of vertebrae are nominally regularly spaced.

13. (Original) The node-and-strut structure of claim 1 in which $j>0$.

14. (Original) The node-and-strut structure of claim 1 in which $k>0$.

15. (Original) The node-and-strut structure of claim 1 in which $j=p=0$.

16. (Original) The node-and-strut structure of claim 1 in which $k=q=0$.

17. (Original) The node-and-strut structure of claim 1 in which $m=r=0$.

18. (Original) The node-and-strut structure of claim 1, further comprising several additional strut ends each bearing against a corresponding one of the left-hand nodes.

19. (Original) The node-and-strut structure of claim 18 in which the number of said additional strut ends is exactly T, where T is at least 4.

20. (Original) The node-and-strut structure of claim 1 in which the set of vertebrae includes at least eight vertebrae.

21. (Original) The node-and-strut structure of claim 1, further including several inter-primary struts each coupled to a corresponding pair of the primary nodes.

22. (Original) The node-and-strut structure of claim 1, in which said nodes and several additional nodes are all positioned exteriorly so as to form an oblong shape substantially resembling a tube having an elliptical cross section, further comprising several other, interiorly-positioned nodes.

23. (Original) A method of making a node-and-strut structure comprising steps of:

- (a) assembling a set of at least six vertebrae each including one left-hand strut having a proximal portion and a distal portion, one right-hand strut having a proximal portion and a distal portion, and one primary node rigidly engaging the left-hand strut's proximal portion and the right-hand strut's proximal portion, a primary axis passing through each of the primary nodes, the primary nodes each including at least 1% metal by weight, the left-hand struts all being nominally mutually parallel, the right-hand struts all being nominally mutually parallel also;
- (b) bringing several left-hand nodes each to bear against a respective one of said left-hand struts' distal portions such that a left-hand axis lying in a baseplane with the primary axis passes through each of the left-hand nodes, the left-hand axis forming with each of the left-hand struts an acute angle about equal to $j \times 20.9^\circ + k \times 31.7^\circ + m \times 36^\circ + n \times 37.4^\circ$, where j , k , m , and n are each an integer ≥ 0 ; and
- (c) bringing several right-hand nodes each to bear against a respective one of said right-hand struts' distal portions such that a right-hand axis parallel to the baseplane passes through each of the right-hand nodes, the right-hand axis forming with each of the right-hand struts an acute angle about equal to $p \times 20.9^\circ + q \times 31.7^\circ + r \times 36^\circ + s \times 37.4^\circ$, where p , q , r , and s are each an integer ≥ 0 .

24. (Original) The method of claim 23, further including a triangulation step (d) of adding to said node-and-strut structure several additional nodes and several additional struts so that all of the nodes each bear against at least 3 of the struts that are not nominally mutually coplanar.

25. (Original) The method of claim 24 in which said struts each have an actual length that is nominally included in a predefined length set consisting of 6 lengths.

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